



STORMWATER MANAGEMENT REPORT ADDENDUM
PHASE 1F ANALYSIS
MAINSTREET NB REDEVELOPMENT PROJECT
BLOCK 148, LOTS 5.04, 7.01, 7.03 & 23
NORTH BRUNSWICK TOWNSHIP, MIDDLESEX COUNTY, NEW JERSEY
JANUARY 14, 2022

Kleinfelder has prepared this Stormwater Management Report Addendum to address the updated layout and drainage design for Phase 1F of the MainStreet NB Redevelopment Project. Kleinfelder previously prepared the Stormwater Management Report for the MainStreet NB Redevelopment project (last revised February 2, 2012). This addendum serves to evaluate the conformity of the updated Phase 1F plan with our previously approved drainage analysis.

INTRODUCTION

Phase 1F is bound by Grand Avenue and Panera Bread restaurant to the north, Wet Pond Basin B to the west, Main Street to the south, and proposed Tenth Avenue to the east. Grand Avenue, Basin B, Main Street, and the Panera Bread restaurant were constructed as part of previous phases of the development. Tenth Avenue will be constructed in Phase 1F. The proposed Phase 1F development is mixed-use, consisting of commercial buildings, restaurants, townhomes, surface parking, hardscape areas, and grass areas. The proposed land cover and drainage areas are shown on Figure 1, attached.

DRAINAGE ANALYSIS

An area of interest (AOI) was delineated around the Phase 1F development for the purposes of this drainage analysis. The AOI is approximately 15.03 acres.

The post-developed drainage area boundaries from the Kleinfelder Stormwater Management Report (2012) were used to determine the previously approved drainage areas within the AOI. Based on the previous drainage analysis, approximately 14.24 acres within the AOI drained to Basin B, and approximately 0.79 acres drained to Basin D (see Table 1).

Drainage areas were also delineated within the AOI for the updated Phase 1F plan. The land cover and overall drainage area boundary for the Phase 1F area of interest is shown in the attached Figure 1. In the updated plan, approximately 14.11 acres within the AOI drain to Basin B, and approximately 0.92 acres drain to Basin D (see Table 1). As a result, the latest Phase 1F plan decreases the runoff area to Basin B by 0.13 acres and increases the runoff area to Basin D by 0.13 acres (see Table 1).

These slight changes to the drainage areas are de minimis and will have no impact on the overall stormwater drainage design. In the previous Kleinfelder Stormwater Management Report, the Basin B drainage area was 36.86 acres, and the Basin D drainage area was 43.90 acres. Therefore, the updated Phase 1F plan results in only a 0.35% change to the Basin B drainage area and a 0.30% change to the Basin D drainage area.

Table 1: AOI Drainage Area Summary

Drainage Area Discharge Location	Phase 1F Drainage Area (2012)	Phase 1F Drainage Area (Current)	Comparison
Basin B	14.24 acres	14.11 acres	0.13-acre reduction
Basin D	0.79 acres	0.92 acres	0.13-acre increase
Total Area (AOI)	15.03 acres	15.03 acres	N/A

The amount of impervious cover was calculated within each drainage area of the AOI. Based on the previous drainage analysis, there was approximately 12.84 acres of impervious cover within the Basin B drainage area and approximately 0.75 acres of impervious cover within the Basin D drainage area. In the latest plan, there is approximately 11.78 acres of impervious cover within the Basin B drainage area and approximately 0.75 acres of impervious cover in the Basin D drainage area. As a result, the latest Phase 1F plan reduces impervious cover by 1.06 acres within the Basin B drainage area and maintains the same amount of impervious cover within the Basin D drainage area (see Table 2).

Table 2: AOI Impervious Area Summary

Drainage Area Discharge Location	Phase 1F Impervious Area (2012)	Phase 1F Impervious Area (Current)	Comparison
Basin B	12.84 acres	11.78 acres	1.06-acre reduction
Basin D	0.75 acres	0.75 acres	No change

In addition to the Phase 1F AOI, the remaining sections of Tenth Avenue and Sunset Street between Phase 1F and Grand Avenue will be finalized and paved. These sections of Tenth Avenue and Sunset Street will drain to Basin C, as was previously approved through the pipe network shown on the Reynolds design plans.

CONCLUSION

In summary, the latest Phase 1F plan results in virtually no change to the Basins B and D drainage areas and reduces impervious cover. Therefore, the updated Phase 1F plan is consistent with the previously approved stormwater management design and does not require any modifications to the previously approved stormwater management basins.



James F. Cosgrove, Jr., P.E.
NJ. P.E. Lic. No. 24GE03613300

1/14/2022

Date



0 220 440



SCALE: 1" = 220' SCALE IN FEET

The information included on this graphic representation has been compiled from a variety of sources and is subject to change without notice. Kleinfelder makes no representations or warranties, express or implied, as to accuracy, completeness, timeliness, or rights to the use of such information. This document is not intended for use as a land survey product nor is it designed or intended as a construction design document. The use or misuse of the information contained on this graphic representation is at the sole risk of the party using or misusing the information.



PROJECT NO. 6204
 DRAWN BY: LTS
 CHECKED BY: BJF
 DATE: 01-12-2022
 REVISED:

PHASE 1F
 LAND COVER FIGURE

MAIN STREET NB
 BLOCK 148, LOTS 5.04, 7.01, 7.03 & 23
 NORTH BRUNSWICK TOWNSHIP, NJ

FIGURE

1

PAGE: 1 of 1